



ADOPTION OF TECHNOLOGY IN EDUCATION

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ABSTRACT

The digital revolution is transforming our work, our organizations and our routines. It is transforming the way children and young people play, access information, communicate with each other and learn. But, so far, this revolution has not transformed most of the institutions from traditional working process or teaching and learning process in classrooms.

Major problems faces by the institutions are complex admissions process, exam paper management and satisfying techno savvy student. Educational institutions can solve most of their issues by mapping technology solutions to the problem areas. Most of institutions feel that technology will be the vital contributor in addressing their problem areas. The top priorities for institutions are improving student results, enhancing the quality of teaching, optimizing costs, keeping pace with the competition and, last but not the least, strengthening the faculty. But there are doubts relating to costs, the lack of technical knowledge, and the issue of potential breakdowns, all of which create an atmosphere of anxiety.

Thus this paper aims to find out the benefits and challenges in adoption of technology in education.

KEY WORDS: Technology, Education, Students, Teacher, Educational Institutes.

INTRODUCTION:

Our government has bought the program of skill development and trying to change the policy in education which helps the country for getting skill people as per the industry requirement. This is because of a strong concern that our educational systems are outdated. It has not possible to promote the necessary skills in our students for the future. The previous generations' motivation to study was strongly based on sense of duty. Changing environment change our young generation's motive for study. Adoption of technology has change the society at large. Digital communication is evolving as emerging social practices for the new generation. There is no reason to assume that the development of Information communication Technology will be any slower in the future. In contrast, new innovations will emerge at an increasingly faster pace. We need to take care of our future by designing innovative and engaging learning environments for our youth. There are multiple sources by using technology where student will be able to acquire knowledge. We are moving from an individualistic knowledge acquisition culture towards a collaborative knowledge creation culture of learning.

Objective of the paper:

- To understand the role of technology in education
- To identify the challenges for adoption of technology in education
- To access the benefits of technology usage for development of skill

METHODOLOGY:

Exploratory study is based on secondary data collects from reports, research work and news articles and the primary data from 75 interviews with end-users or institutions. Data collected in is compiled in a way to understand the problems and benefits of the adoption of technology in education in the era of digitization and globalization where everybody is talking about technology

Top 5 Priorities of the Institutions for the Future

As per the report, "An Overview of Technology Adoption within the Education Sector" by Tata Consultancy Services mention top five priorities of educational institutes are :

- Faculty Development:** The importance of Faculty Development needs to be emphasized. The faculty is the cornerstone for developing and augmenting the individual abilities of students.
- Keep pace with competition:** 30% of Institutions do feel they should use increased automation to alleviate their problems; yet it is not among the top 5 actionable items for institutions. This indicates their lack of confidence in adopting IT solutions in education. Thus, awareness campaigns are needed to thoroughly acquaint institutions with the appropriate solutions.
- Cost Optimization:** Cost Reduction is a high-priority item since institutions suffer from financial constraints and therefore need to conduct their

development activities by optimizing their current budget infrastructure.

- 4. Improve quality effectiveness of teaching and learning:** Enhancing Quality/ Effectiveness of Teaching & Learning Process is vital in fostering academic excellence and also in maintaining student interest levels
- 5. Improve student result:** Improving Student Results is crucial to institutions since results naturally affect the overall brand, thereby giving an edge over competitors

For all these technology plays a very important role. Development of faculty as per the techno savvy student by adopting technology will help them to improve the quality and effectiveness of teaching and learning process.

Role of Technology in improving services

"One of the most important aspects of technology in education is its ability to level the field of opportunity for students."

- John King, U.S. Secretary of Education

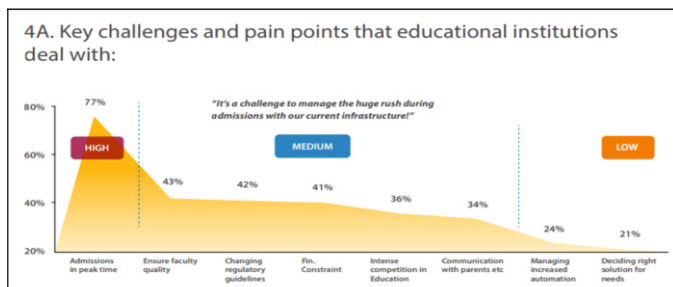
With technology, educators, students and parents have a variety of learning tools at their fingertips. Some of the ways in which technology improves education over time:

- Teachers can collaborate to share their ideas and resources online:** They can communicate with others across the world in an instant, meet the shortcomings of their work, refine it and provide their students with the best. This approach definitely enhances the practice of teaching.
- Students can develop valuable research skills at a young age:** Technology gives students immediate access to an abundance of quality information which leads to learning at much quicker rates than before.
- Students and teachers have access to an expanse of material:** There are plenty of resourceful, credible websites available on the Internet that both teachers and students can utilize. The Internet also provides a variety of knowledge and doesn't limit students to one person's opinion.
- Online learning:** Distant and online learning is also one of the best options for the people who do not afford to spend time or money. There are large number of online affordable content and certificate courses available for the student who intend to learn.
- Long-term research indicative of the positives of technology on learning:** Researches have been performed to address the question, does the use of computer technology affect student achievement in traditional classrooms as compared to classrooms that do not use technology.
- Educational Technology improves student learning outcomes:** Evidence

suggests that educational technologies can improve student achievement, so long as such tools are integrated thoughtfully into teaching and learning. When digital capabilities like, online environments are incorporated meaningfully into instruction, students have new opportunities to learn and achieve.

Key Challenges to increased IT adoption

As per the report of TCS, An Overview of Technology Adoption within the Education Sector Key challenges faced by educational institutes are Admission peak time, quality of faculty, regulatory guideline, financial constrain, competition, communication with stakeholders etc.



Source : TCS Report

As per the survey of 75 interviews with end-users or institutions it is clear that although the importance of IT is acknowledged, the true value has not yet been established. There are doubts regarding costs, lack of knowledge, system breakdown etc. that create apprehension about possible problems. Most users still believe IT implementation is high cost.

Table 1: Challenges to increased IT adoption

Particulars	%
High cost of upgrade or new purchase of the technology	81
Student staff need more knowledge and training	49
High maintenance cost	48
Inadequate support and service from vendors	35
Need more input to add value	28

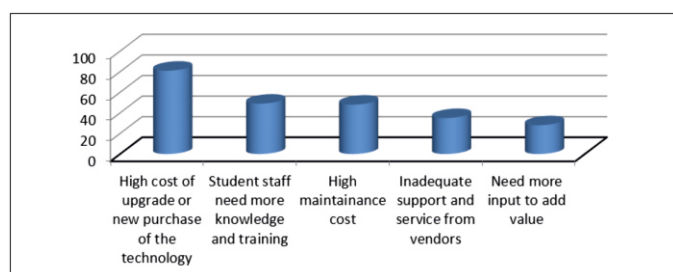


Fig 1: Challenges to increased IT adoption

Perceived benefits of Information Technology among Institutions

Survey results also find out the perceived benefits of automation. 53% of Respondents support that automation is vital for knowledge-gathering & research. Half of the respondent agree for the benefits of technology for various education / training programs. 48 % believe that automation improves timeliness and is extremely useful in knowledge gathering and research. Approximately 30% indicated that IT drastically increases productivity.

Some thoughts at the time of interview is "Nowadays there are no boundaries or borders of knowledge gathering. We can collaborate & gain knowledge from the best institutions across the globe – thanks to the Internet! This is invaluable for research."

"IT enhances efficiency and so automatically speeds up our entire work process – thus reducing the overall time-line and making our lives easier."

"Students are everything to us, and they also contribute to our brand image as an institution...we can benefit students in multiple ways using technology, e.g. through social learning, student analytics, etc."

"Nowadays we can hardly think of our daily work without the help of IT."

Table 2: Perceived benefits of Information Technology

Particulars	%
Automation vital for knowledge-gathering & research	53%
Drastically increases productivity	30%
IT can support edu/ training-programs	49%
Improve timeliness	48%

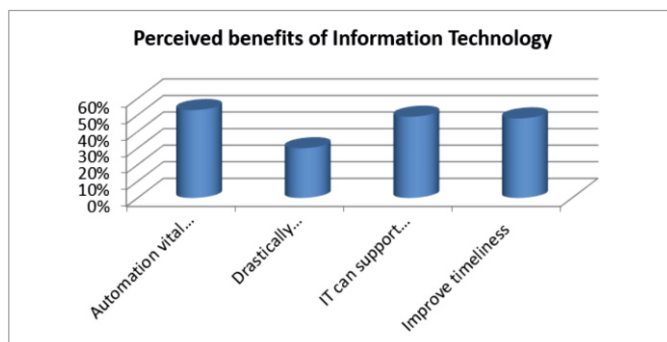


Fig 2: Perceived benefits of Information Technology

FINDINGS:

- Nearly 60% of institutions feel that IT remains a vital contributor in addressing their problem areas.
- The top priorities for institution remain: improving student results, enhance the quality teaching, optimizing costs, keeping pace with the competition and last, but not least, strengthening the faculty
- Over 30% of institutions do feel they should use increased automation to alleviate their problems
- Importance of IT is acknowledged but the doubts regarding costs, lack of knowledge, system breakdown etc. that create apprehension about possible problems. Most users still believe IT implementation is high cost.
- Survey results also find out the perceived benefits of automation. 53% of Respondents support that automation is vital for knowledge-gathering & research. Half of the respondent agree for the benefits of technology for various education / training programs. 48 % believe that automation improves timeliness and is extremely useful in knowledge gathering and research. Approximately 30% indicated that IT drastically increases productivity

CONCLUSION:

Educational institutions is mainly depend on few requirements like managing a larger number of students during admissions, adhering to regulatory guidelines, keeping pace with the competition, maintaining open lines of communication with parents, etc. Considering these factors, some of the immediate priority actions for institutions are satisfying stakeholder expectations, optimizing costs, enhancing quality of teaching –learning process and improving student results, brand building, etc. Many of these actionable items need help with technology. Technology help in problem solving and fast decision making but only need to overcome the problems like skill for handling technology, investment in technology, faculty training and so on. It is true that end-users are accepting the importance of technology and long term benefit of them but only need to adoption of technology to compete with the technical institutes.

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